Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
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Review of the Emergency Alert System	)	EB Docket No. 04-296
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Comments and Recommendations
of Joshua P. Shelton, Law Student, Loyola Law School, Los Angeles, CA.

Introduction

On November 10, 2005, the *Federal Communications Commission* (hereinafter "FCC") released a *Notice of Proposed Rule Making* (hereinafter "NPRM") entitled *Review of the Emergency Alert* System, directed towards the current state of the Emergency Alert System (hereinafter "EAS"), its relation to new found technology, and the growth EAS must sustain in order to continue serving as the most effective emergency notice system in the emerging digital world. This particular NPRM sought comments on a multitude of issues, including but not limited to, *Government Efforts to Develop a Digital Warning System, System Architecture/Message Distribution,* and *Common Protocols.*

Throughout the entirety of the NPRM, the FCC's goal of "providing the American public with an effective and robust national alert and warning system" is clearly voiced. In attempting to obtain this goal, the FCC, along

with the Federal Emergency Management Agency (hereinafter "FEMA") and the Department of Homeland Security (hereinafter "DHS"), serve all that live within the confines of the American borders by providing emergency warnings and instructions for impending catastrophes. As a member of the American public, and a citizen concerned with the safety of the nation, I, Joshua Shelton, write this comment letter.

As was noted in the NPRM, the EAS has been in place since 1994, and although its purpose has been achieved on many levels, it is amazing that the EAS has survived over ten years without a serious overhaul. It is common knowledge that the current technology boom quickly outdates even the most recently released hardware and software on the market. In fact, it seems as soon as the current upgrades are available, a newer and faster next generation upgrade becomes available that relinquish the older models into an obsolete status. It appears the FCC understands the tremendous impact that digital technologies are having on broadcast, cable and satellite news and entertainment industries when it poses the question; "whether EAS in its present form was the most effective mechanism for warning the American public of an emergency and, if not, how EAS can be improved." First, I applaud the FCC for questioning the current status of the EAS, it exemplifies the values and drive to preserve public safety which the commission was founded upon. Second, I answer the question posed.

No. The EAS in its present form is not, and without the implementation of current technology, cannot be the most effective mechanism for warning the American public of an emergency. Suffice to say, the solution to the current problem is complicated and will require resources past those of the FCC in order to create the most efficient public warning system. My position is, that lacking a massive change in technological resources in the last ten years, it is evident that EAS requires some sort of "upgrade" in order to best utilize the technological resources available. Accordingly, FEMA and NOAA, have implemented pilot projects that explore the use of sophisticated digital technologies to create an Integrated Public Alert and Warning System that involve partnerships and coordination between government and private industry.[1] Pilot programs such as this will pave the way for the future of the EAS, an EAS best suited for notifying the public of emergencies in a digital world.

That being said, it is quite unlikely that a single comment letter could sufficiently address all the issues contained within the NPRM. As a result, the scope of this comment letter is confined specifically to the issue raised by the FCC concerning *Government Efforts to Develop a Digital Warning System* and the role the FCC can and should play in those efforts. After

[1] Testimony of Michael D. Brown, Under Secretary of Homeland Security for Emergency Preparedness and Response, Federal Emergency Management Agency, House of Representatives, Committee on Appropriations, Subcommittee on Homeland Security, March 9, 2005 and Testimony of Reynold N. Hoover, Director, Office of National Security Coordination, FEMA, Department of Homeland Security, All-Hazards Alert Systems, Senate Committee on Commerce, Science and Transportation, Subcommittee on Disaster Prevention and Prediction, July 27, 2005.

briefly discussing the current government efforts surrounding a digital version of EAS, I will discus several ways the FCC should become involved in these efforts so that the FCC can make a smooth transition into regulating the newer digital version of the EAS.

CURRENT GOVERNMENT EFFORTS

The EAS in its current form was established in 1994 and is essentially a cascade, trickle down, distribution system from the FEMA Operations Centers to 34 designated Primary Entry Point (hereinafter PEP) radio broadcast stations. At the request of the President, a signal can be distributed to the PEP stations, which in turn re-broadcast the signal to monitoring stations down stream which then broadcast the message over TV and radios.[2] The system is designed to provide the President the capability to transmit within ten minutes from any location at any time. This Presidential message is mandatory, must take priority over any other message and must preempt other messages in progress. All other broadcasts of emergency messages are voluntary. Nevertheless, State and local emergency managers can, and do, activate the EAS for state and local public alert and warning messages such as AMBER alerts, hazardous material incidents and weather warnings. The National Oceanic and Atmosphere Administration (hereinafter NOAA), and the National Weather Service, serve as the originator of emergency weather information, and play a significant role in the

[2] Statement of Reynold N. Hoover, Director, Office of National Security Coordination (FEMA), http://commerce.senate.gov/pdf/hoover.pdf

implementation of EAS at the state and local level. While FEMA tests on a weekly basis the connectivity to the 34 PEP stations, the national level EAS has never been fully activated.

Carried by the advances of up-to-date technology, in an attempt to expand the nation's alert and warning system FEMA, along with NOAA, are testing technology that can transmit text, voice, and video messages simultaneously to wireless devices, radios, television, and internet under the Department of Homeland Security's Integrated Public Alert and Warning (hereinafter IPAW) initiative[3]. Currently, this project is known as the Digital Emergency Alert System pilot (hereinafter DEAS). Utilizing the digital capabilities of the nation's public television stations and the voluntary participation of cell phone service providers, public and commercial radio and television broadcasters, satellite radio, cable and internet providers, and equipment manufacturers, the tests represent the beginning of an IPAWS program designed to provide critical life saving information to the nation in a timely and effective manner.[4]

The DEAS furthers several of the FCC's goals, specifically, accessibility to persons with disabilities. Having the option of receiving the emergency warning via text, voice, and video message ensures that those with hearing and seeing disabilities will have free access to the information

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[3] Dibya Sarkar, *Technology Will send messages to wireless devices, radio, TV and internet*, http://www.fcw.com/article88522-04-11-05-Print

[4] EAS Pilot Digital Tests Prove Successful and Forecast A Greatly Enhanced Alert and Warning System For America, release Date: February 14, 2005. http://www.fema.gov/news/newsrelease.fema?id=16527.

disseminated. The FCC has readily commented on its commitment to ensuring that persons with disabilities have equal access to public warnings and are considered in emergency preparedness planning. Thus, this particular technological advancement by FEMA furthers such a goal.

Additionally, because the signal sent out is a digitally encoded alert and warning message, it's my understanding that it is a single signal that when received by recipients, whether a TV station, cellular phone company, radio station, or internet service provider, can strip from the signal what they could use for their particular medium and retransmit it to their respective customers. Reynold Hoover, Director of FEMA's Office of National Security Coordination, stated that the national Emergency Alert System reaches 95 percent of the population mainly through TV and radio broadcasts.[5] The problem is, not everyone has a television or radio or is constantly watching or listening to them. Having more potential avenues to reach American citizens gives way for the potential to reach a higher percentage of citizens, thus making the EAS a more effective emergency warning utility. Consequently, the DEAS serves another goal of the FCC, and its mission to provide the most efficient warning system to the general public.

Initially, the DEAS was a localized pilot, but FEMA has taken steps to build upon the preliminary tests in order to create and validate the national effects of such an alert system. Hoover said Congress has allocated a total of $22 million in fiscal 2004 and 2005 for all alert and warning projects,

[5] *Id.*

including taking the digital capability nationwide and upgrading the EAS satellite and the National Oceanic and Atmospheric Administration's all-hazards radio network.[6] As of yet, FEMA is unsure how much it will cost to implement the technology nationwide, but using open architecture, nonproprietary technology and commercial software reduces costs significantly. They will deploy the distribution infrastructure nationwide once the tests have been completed and assessed and money is available.

Where Does the FCC fit in?

The FCC was established by the Communications Act of 1934 and is charged with regulating interstate and international communications by radio, television, wire, satellite and cable. The FCC's jurisdiction covers the 50 states, the District of Columbia, and U.S. possessions.[7] Consequently, the FCC will have jurisdiction over all interstate and international communications that will some day be required by congressional mandate to employ the use of DEAS, or a similar system. With this said, it is clear that the innovations of the DEAS, will require the FCC to develop new regulations which will nurture a relationship between various service providers and a newer version of the EAS. It is imperative that the FCC be intimately involved with the current government efforts to create a digitally based EAS system. Being involved at the inception the with initiatives such as IPAW

[6] Statement of Reynold N. Hoover, Director, Office of National Security Coordination (FEMA), http://commerce.senate.gov/pdf/hoover.pdf

[7] http://www.fcc.gov/aboutus.html

and DEAS, will give the FCC the required technical knowledge of the inner-workings of a new digitally based EAS system which will be required in order to create fair and effective regulation for all broadcasters.

Based upon the above, I recommend that the FCC create a special committee targeted to work directly with FEMA and the DHA in a collaborative effort to create and implement a new digitally based EAS system. This committee need not cause a tremendous strain on the current efforts of the FCC, but the nation's current concern with an effective emergency warning system, after 9/11, various hurricanes on the east coast, and hurricane Katrina and all of its devastation, has grown to a point where the FCC has openly admitted its recognition. Having an FCC committee working with FEMA and the DHS in the development of a digitally based EAS system will allow the FCC to have qualified insight into creating regulation for broadcasters. Because it will ultimately be the FCC which creates the regulation for the newer EAS, not FEMA or DHS, it seems only fitting that the FCC be involved with every level of creation.

Surely there is a part for the FCC to play in the evolution of the EAS; If not through cooperation with FEMA or DHS, then possibly through assisting them by researching other variables that must be answered. The FCC could potentially target its efforts towards the issue of cost for implementing the new technology nationwide. The point I seek to make is, if the FCC is involved as a partner in the creation of DEAS, or any other

digitally based system, the FCC will be better suited to create regulation that ultimately is in the best interest of the public and the participating broadcasters.

Broadcast Participation

Although slightly outside the scope of my current discussion, I would like to briefly discuss the issue of broadcast participation based upon recent events. As referenced above, the current catastrophes that have plagued our great nation over the past few years have readily brought our current EAS into the spotlight. Many have complained about the lack of a potential audience when an EAS message is disseminated. Luckily, the potential of the digital system allows further broadcast participation at minimal effort by NOAA and NWS. Remember, a single *digital* signal is sent out to broadcasters, encoded with various streams that can be deciphered by a multitude of broadcasters to meet their necessary needs for their type of medium.

Historically, the participation of broadcast and cable stations in state and local emergency announcements are voluntary.[8] To be honest, I have always found this particular decision an error on the part of the FCC. Are state emergencies, emergencies which require the alert of an entire state, not

[8] Dibya Sarkar, *Technology Will send messages to wireless devices, radio, TV and internet*, http://www.fcw.com/article88522-04-11-05-Print

important enough to utilize the resources of a federal agency? The FCC requires broadcast and cable stations to install FCC-certified EAS equipment as a condition of licensing. Radio and television broadcast stations, cable companies and wireless cable companies must participate. Cable companies serving

communities of less than 5,000 may be partially exempted from EAS requirements. If the hardware is already in place, the FCC should be able to create some sort of cost/benefit regulation which could possibly subsidize state broadcasters in return for guaranteed participation of the broadcast of the EAS on a case by case basis.

Conclusion

In closing I would like to simply recap a few key themes contained within this comment:

1. The FCC should be a willing partner in the effort to create a digitally based EAS
2. By working hand in hand with FEMA and DHS in the development of a digitally based EAS, the FCC will be able to gain valuable insight as to cost, preparation, and implementation of the DEAS.
3. Strengthen the bonds between the FCC , FEMA, and DHS
4. As the governing body of the EAS, it seems only fitting that the FCC be involved with the

creation of any adaptation of the original system.

5. Address the cost of implementing such a digital system on a national level.
6. With regulation in place for all broadcasters to install EAS capable machinery, it seems a waste to not regulate broadcasters to transmit state emergency announcements.

Respectfully Submitted by:

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Joshua Shelton
April 27, 2006

Additionally, since FCC has controlled the EAS for the last decade, it seems only fitting that they be readily involved in any and all advances in the system.

The strategy recommended a national, all-hazard approach employing multiple distribution technologies. Achieving this goal will require federal leadership; building upon existing legacy systems, standard protocols, terminology, policies and metrics; training for emergency managers; public education and funding. Most importantly, the strategy concluded that warning is a public responsibility -- shared by local, state and federal governments -- that relies upon private sector technologies and infrastructure. Developing an effective national alert and warning capability requires communication, cooperation and consensus among the key stakeholders – both public and private.

That figure is a fraction of the $20 million Congress appropriated to the DHS since 2004 for developing a new public warning system utilizing conventional broadcasting media and various modern communications devices. Even before the flurry of post-Katrina bills, there were plans to add another $5 million for fiscal 2006.

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can, and do, activate the EAS for state and local public alert and warning messages such as AMBER alerts, hazardous material incidents and weather warnings. NOAA, and the National Weather Service, serve as the originator of emergency weather information, and play a significant role in the implementation of EAS at the state and local level. While FEMA tests on a weekly basis the connectivity to the 34 PEP stations, the national level EAS has never been fully activated.

How can EAS be improved…

The CRS report gives various examples of how this can be answered. The FCC should work closely with FEMA in order to best implement these procedures to most efficiently reach the combined goal of public notice of any and all emergencies.

The role that the FCC will play is as follows,

Once FEMA has tested these pilot programs, the FCC will be the commission that implements these programs, creates legislation, creates the rules on how to run these programs, and must have intimate knowledge about these programs in order to make the transition into these newer and better suited technologies as smooth and as efficient as possible.